



Title	A NEW MASSEPHA SPECIES FROM JAPAN (LEPIDOPTERA, PYRALIDAE)
Author(s)	Yoshiyasu, Yutaka
Citation	ESAKIA Special Issue 1 p151-154
Issue Date	1990-04-20
URL	http://hdl.handle.net/2324/2537
Right	

This document is downloaded at: 2012-10-12T15:53:16Z

A NEW *MASSEPHA* SPECIES FROM JAPAN (LEPIDOPTERA, PYRALIDAE)*

YUTAKA YOSHIYASU

Laboratory of Entomology, Faculty of Agriculture, Kyoto
Prefectural University, Shimogamo, Kyoto, 606 Japan

Abstract

A pyraustine species, *Massepha ohbai* sp. nov., is described from Japan.

Up to the present, 17 species of the genus *Massepha* have been known mainly from tropical and subtropical regions. However, no species of the genus is found in Japan. Recently I could examine one unrecorded *Massephu* species from Kyushu which I will describe as new to science in the following line.

The genus is characterized by the upturned labial palpus, the short foretibia, the produced wing apex, the forewing with vein R_2 stalked with or very close to R_{3+4} , and so on.

Shibuya (1928) transferred the genus *Massepha* from the Pyraustinae to the Hydrocampinae (= Nymphulinae) without description (probably due to the forewing venation), but the genitalic characters are well coincident with those of the Pyraustinae.

Massepha ohbai sp. nov.

(Japanese name : Sazanami-nomeiga)

Male & female. Head with frons rounded, evenly whitish ; vertex with erected whitish scales. Labial palpus whitish suffused with brown on distal 1/2 of 2nd and 3rd segments outerly, the 3rd segment narrow and semiacuminate at apex. Maxillary palpus small, whitish. Antenna of both sexes filiform, about 3/4 as long as forewing length ; in male sensory setae very short. Ocellus blackish. Legs long, whitish except darker spots at each segmental tip ; tibial spur well developed, mid outer spur of hindleg about 1/2 and distal outer spur 2/3 as long as each inner one. Thorax and abdomen above whitish with brownish suffusions on anterior 4 abdominal segments.

Wing shape and venation : Forewing with costa straight ; apex narrowly produced ; termen behind apex excurved, then roundly curved to tornus. Vein R_1 arising from near anterior angle of discoidal cell (DC) ; R_2 stalked with R_{3+4} at proximal 1/2, then R_3 stalked with R_4 distally ; M_1 straight ; M_2 and M_3 approximated each other at bases ; 3A rooped to touch 1A+2A at proximal 2/5. Discocellulars erected.

Hindwing with apex roundly produced ; termen slightly undulate to tornus. Vein M_1 emitting from anterior angle of DC ; M_2 anastomosed with M_3 at base ; CuA_1 arised from posterior angle of

* Contribution No. 238 from Laboratory of Entomology, Kyoto Pref. Univ.

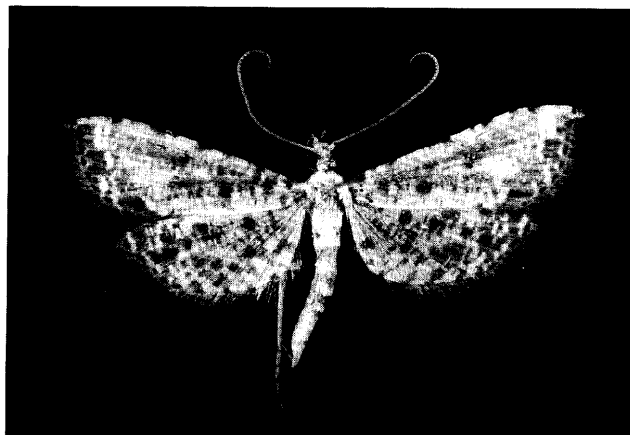


Fig. 1 *Massepha ohbai* sp. nov., male, holotype.

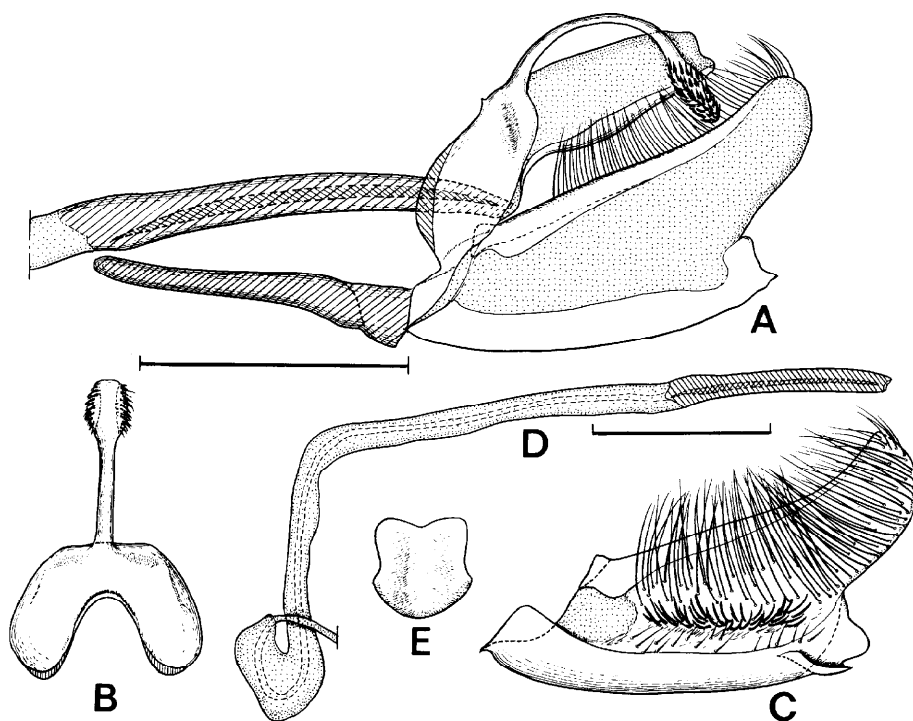


Fig. 2. Male genitalia of *Massepha ohbai* sp. nov. A. Lateral view ; B. tegumen and uncus, dorsal view ; C. valva, inner view ; D. phallus ; E. juxta. Scale : 0.5 mm.

DC ; CuA₂ apart from CuA₁ at base ; discocellulars oblique.

Wing marking : Forewing whitish, with several pale ochreous lines transversely, and with some dark brown spots on costa. Each line component indistinct in shape and width not to determine the

line's name. Discocellular lunule suffused with fuscous. A band in submarginal area rather broad, interrupted at vein CuA_1 , and reappeared at near tornus. Marginal line represented by blackish spots at each end of vein. Cilia whitish with darker marking at proximal 1/3.

Hindwing as in forewing in ground color and marking, but lines transformed to dots in medial area. Ochreous lines on submarginal area convergent to marginal spots on each end of vein. Discocellular lunule clear as a blackish spot.

Male genitalia : Tegumen short, wider than long, with anterior portion U-shapedly excurve ; fenestrulae absent. Vinculum short. Saccus well developed, extended anteriorly, almost as long as valva. Uncus fused with tegumen at base, narrow, strongly curved to apical swollen portion where a pair of groups of stout setae are emitting at both lateral sides. Gnathos undeveloped. Valva complex in shape, base narrow and widened dorsoapically ; costa rather narrow, reached valval apex ; inner surface with many long setae extending innerly and upwards, and with a row of stout setae below them ; sacculus wide and reaching apical portion where a flat specialized process is arisen. Phallus long and slender, with burbus ejaculatorius much long ; coecum penis undeveloped ; vesica with a long cornutus, occupying whole length of phallus. Juxta small.

Female genitalia : Ductus bursae short, broadly sclerotized. Corpus bursae long ; basal portion narrow and curved, with a pair of series of spinules as in Fig. 3 ; apical portion large and rounded, as long as 7th tergum, with a pair of signa which are weak and consisting of minute spinules. Spermatheca short, with a pouch of lagena basally. Eighth tergum wide, with some short setae in

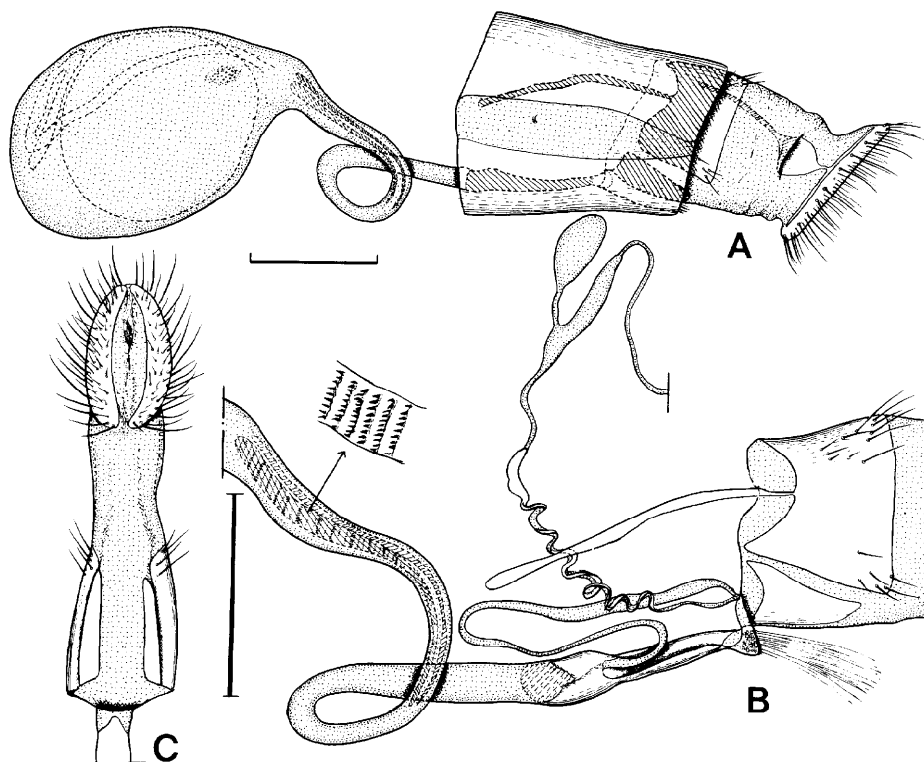


Fig. 3. Female genitalia of *Massepha ohbai* sp. nov. A. Lateral view ; B. spermatheca and base of corpus bursae ; C. 8th to 10th abdominal segments. Scale : 0.5 mm.

dorsol and lateral portions ; apophysis anterioris curved, about 0.8 as long as 7th tergum ; sternum with a pair of triangular sclerites laterally. Papilla analis wide, with many setae posteriorly ; apophysis posterioris widened at subbasal portion, a little shorter than the anterioris.

Size of forewing : Male, 6.0 mm ; female, 6.2-6.4 mm.

HOLOTYPE, male, Shimobaru, Fukuoka-shi, Fukuoka Pref., 9. ix. 1985, M. Ohba leg.

PARATYPES, 1 male and 2 females, 22. viii. 1985, 8. ix. 1985, same locality as in holotype, M. Ohba leg. Types are deposited in the Entomological Laboratory, Kyushu University, except one female paratype in the British Museum (Natural History).

DISTRIBUTION. Japan (Kyushu).

REMARKS, The new species is very close to *M. absolutalis* Walker, 1859 (Sri Lanka) in the wing marking, but separable from the latter as follows : Smaller in size ; wing markings slightly paler, especially at hindwing apex ; vein M_2 of hindwing anastomosed with M_3 at base, whereas in *absolutalis* these two veins are approximated.

Acknowledgments

I express my sincere thanks to Dr. M. Ohba of Kyushu University for offering me the material used in this study, and to Mr. M. Shaffer of British Museum (Nat. Hist.) for kindly making the comparison the new species with the specimen of *M. absolutalis* from India.

References

- Hampson, G. F., 1896. *Fauna Br. India, Moths*. **4** xxviii+594 pp.
Shibuya, J., 1928. The systematic study on the Formosan Pyralidae. *J. Fac. Agr., Hokkaido Imp. Univ.*, 22 : 1-300, 9 pls.
Walker, F., 1859. *List Spec. lep. Ins. colln. Br. Mus.*, **17** : 255-508.